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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/569,011

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Tauno Laakso

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EXAMINER

RODRIGUEZ, JOSEPH C

ART UNIT

PAPER NUMBER

3653

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/569,011	Applicant(s) LAAKSO, TAUNO	
	Examiner JOSEPH C. RODRIGUEZ	Art Unit 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/21/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

Claim Objections

The claims are objected to because of the following informalities:

Dependent claims should read "**The**" instead of "A".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17-18 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Chupka et al. ("Chupka")(US 4,410,424).

Chupka (Fig. 1-4) teaches a screen cylinder for cleaning or screening fiber pulp, comprising:

a plurality of ring-shaped support rods (66, 52, 60), each support rod defining an axis extending therethrough and the support rods being arranged in spaced-apart relation such that the axes thereof are coaxially disposed to define a screen cylinder axis;

a plurality of longitudinally-extending screen wires (56 shown inside rods) fastened at lateral intervals to the support rods such that the screen wires cooperate

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with the support rods to form a cylindrical screen surface of the screen cylinder, the screen surface having opposed ends, with at least one of the support rods being disposed about one of the ends of the screen surface (near 66); and

an end ring mounted to the at least one of the support rods closest to one of the ends of the screen surface (62 with weld joint shown near 66; col. 5 teaching welding of rings). Further, the claimed steps of shrink fitting the end ring to the ring-shaped support rods relate to a method of making the screen rather than the actual screen device. Examiner advises applicant that mixing statutory classes of invention may lead to indefiniteness during claim interpretation, thus Examiner seeks clarification on the type of claim Applicant has created. See MPEP 2173.05(p). Further, the method steps in these claims resemble product-by-process limitations and have been treated as such. That is, the limitations relating to how the screen is formed would not be expected to impart distinctive characteristics to the screen device and, moreover, when there is a substantially similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct. See *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983); MPEP 716.01 (establishing that a statement or argument by the attorney is not factual evidence). Thus, these claims can be regarded as anticipated by the applied prior art, and the burden of proof is shifted to Applicant, not the Examiner, to show that the process of making renders the claims patentably distinct. See *In re Brown*, 173 USPQ 685 and *In re Fessmann*, 180 USPQ 324.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5, 7-10, 13, 15-16 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chupka in view of Schabel et al. ("Schabel")(US 6,056,126), Lange (US 5,094,360), and Mickelat et al. ("Mickelat")(US 6,579,458).

Chupka as set forth above teaches all that is claimed except for expressly teaching mounting an end ring to the at least one of the support rods closest to one of the ends of the screen surface such that at least a portion of an inner circumference of the end ring forms the shrink fit with an inner/outer circumference of the at least one of the support rods or having the screen wires disposed outside the ring-shaped support rods to form the cylindrical screen surface outside the ring-shaped support rods, whereby a force resulting from the shrink fit is directed substantially perpendicularly to the screen cylinder axis, and acting between the end ring and the at least one of the support rods, secures the screen cylinder surface in substantially immobile relation relative to the end ring via the at least one of the support rods, wherein the end ring defines at least one hole extending radially through the end ring toward the at least one of the support rods, and the method further comprises engaging a locking element with

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the at least one hole such that the locking element secures the end ring and the at least one of the support rods together. These features, however, are well-known in the sorting arts. For instance, Schabel expressly teaches that it is known to use thermal shrink fitting when attaching the cover elements to protect the screen elements from vibrations (col. 2, ln. 40-68; see also Lange, col. 5, ln. 58 et seq. teaching that end rings may be shrink fitted to the end faces of the screen basket). It logically follows that one with skill in the art would know to shrink fit the cover and rod configuration of Chupka to protect against vibrations. Schabel also teaches a locking element with one hole (Fig. 2, 5; col. 5 teaching screw connection for adjustability; see also Mickelat, Fig. 10 near 46; col. 10 teaching releasable connection of cover elements with pin) and that the screen wires may be placed either on the inside or outside as a matter of design choice (Fig. 3, 4; col. 6). It would thus be obvious to one with ordinary skill in the art to modify the base reference with these prior art teachings to arrive at the claimed invention. The rationale for this obviousness determination can be found in the prior art itself as cited above. Further, the modifications to arrive at the claimed invention would merely involve the substitution/addition of well-known elements with no change in their respective functions (i.e., substitution of shrink fit or addition of connecting hole-pins). Moreover, the use of prior art elements according to their known functions is a predictable variation that would yield predictable results, and thus cannot be regarded as a non-obvious modification when the modification is already commonly implemented in the prior art. See MPEP 2143. Further, the prior art discussed and cited demonstrates the level of sophistication of one with ordinary skill in the art and that

these modifications would be well within this skill level. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Chupka for the reasons set forth above.

Claims 3-4, 6, 11-12 and 14 and rejected under 35 U.S.C. 103(a) as being unpatentable over Chupka in view of Schabel et al. ("Schabel")(US 6,056,126), Lange (US 5,094,360), and Mickelat et al. ("Mickelat")(US 6,579,458) as applied to the claims above, and further in view of Frejborg et al. ("Frejborg")(US 5,200,072).

Chupka et al. as set forth above teach all that is claimed except for expressly teaching the specific method steps involved in shrink fitting such as forming the shrink fit between the end ring and the at least one of the support rods by: at least one of radially expanding the end ring and radially contracting the at least one of the support rods; mounting the end ring to the at least one of the support rods such that at least a portion of the inner circumference of the end ring surrounds the outer circumference of the at least one of the support rods; and at least one of radially contracting the end ring and radially expanding the at least one of the support rods so as to form the shrink fit therebetween, wherein radially expanding the end ring further comprises heating the end ring, and radially contracting the end ring further comprises at least one of cooling the end ring and allowing the end ring to cool. Here, it is noted that Chupka et al. already teach that the process of thermal shrink fitting is well known in the screening arts. Frejborg further teaches that shrink fitting is known to involve the thermal expansion and then cooling of a specific element to provide a secure fit (col. 5, 9).

It would thus be obvious to one with ordinary skill in the art to modify the prior art references with these specific teachings regarding shrink fitting to arrive at the claimed invention. The rationale for this obviousness determination can be found from an analysis of the prior art teachings that teaches that the modification to arrive at the claimed invention would merely involve the substitution/addition of well-known elements with no change in their respective functions (i.e., addition of specific shrink fitting steps). Moreover, the use of prior art elements according to their known functions is a predictable variation that would yield predictable results, and thus cannot be regarded as a non-obvious modification when the modification is already commonly implemented in the prior art. See MPEP 2143. Further, the prior art discussed and cited demonstrates the level of sophistication of one with ordinary skill in the art and that these modifications would be well within this skill level. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Chupka et al. for the reasons set forth above.

Conclusion

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Joseph C Rodriguez** whose telephone number is **571-272-6942** (M-F, 9 am – 6 pm, EST). The Supervisory Examiner is Patrick Mackey, **571-**

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272-6916. The **Official** fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

The examiner's **UNOFFICIAL Personal fax number** is **571-273-6942**.

Further, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only. For more information about the PAIR system, see

<http://pair-direct.uspto.gov>

Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at **866-217-9197** (Toll Free).

/Joseph C Rodriguez/
Primary Examiner, Art Unit 3653
Jcr

March 17, 2008